



Complete Summary

TITLE

Heart failure: the percentage of patients with a current diagnosis of heart failure due to LVD who are currently treated with ACE inhibitor or ARB, who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers.

SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients with a current diagnosis of heart failure due to left ventricular dysfunction (LVD) who are currently treated with angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB), who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers.

RATIONALE

Heart failure represents the only major cardiovascular disease with increasing prevalence and is responsible for dramatic impairment of quality of life, carries a poor prognosis for patients, and is very costly for the National Health Service

(NHS) to treat (second only to stroke). This measure is one of four [Heart Failure](#) measures.

The evidence base for treating heart failure due to left ventricular dysfunction (LVD) with beta-blockers is at least as strong as the evidence base guiding the HF 3* indicator on angiotensin-converting enzyme (ACE) inhibitors (Level Ia), with a 34% reduction in major endpoints of beta-blockers on top of ACE inhibitors compared to placebo, and is a standard recommendation in all heart failure guidelines including NICE. The belief that beta-blockers are contraindicated in heart failure was disproved, at least for the licensed beta-blockers, in the late 1990s and in some countries (especially Scandinavia) beta-blockers have never been contraindicated in heart failure. Furthermore, there are no data to suggest excess risk in the elderly (SENIORS with nebivolol only randomised people over 75 with significant benefits and no safety signal) and there are no contraindication for use in people with chronic obstructive pulmonary disease (COPD).

However, this strategy is more difficult in clinical practice than initiating ACE (more contraindications, less tolerated, with a need for slower but more dose titration steps). Furthermore, there are negative trials of beta-blockers in heart failure and concerns over the effectiveness of atenolol in reducing vascular risk generally. Therefore the beta blocker used should be one licensed for heart failure, which is also in line with NICE recommendations. The only such agents in the UK are carvedilol, bisoprolol and nebivolol.

However, despite the evidence above, initiating beta-blockers in heart failure, or switching from one not licensed for heart failure, is more difficult because of the need to titrate from low doses and small increments over repeated visits. Patients also often suffer a temporary deterioration in symptoms with beta-blocker initiation which needs monitoring. The British National Formulary states that 'beta-blockers bisoprolol and carvedilol are of value in any grade of stable heart failure and left-ventricular systolic dysfunction; nebivolol is licensed for stable mild to moderate heart failure. Beta-blocker treatment should be started by those experienced in the management of heart failure, at a very low dose and titrated very slowly over a period of weeks or months. Symptoms may deteriorate initially, calling for adjustment of concomitant therapy.'

*See the related National Quality Measures Clearinghouse (NQMC) summary of the British Medical Association/National Health System (NHS) Confederation measure [Heart failure: the percentage of patients with a current diagnosis of heart failure due to left ventricular dysfunction \(LVD\) who are currently treated with angiotensin-converting enzyme \(ACE\) inhibitor or angiotensin receptor blocker \(ARB\), who can tolerate therapy and for whom there is no contraindication](#).

PRIMARY CLINICAL COMPONENT

Heart failure; left ventricular dysfunction (LVD); angiotensin-converting enzyme (ACE) inhibitor; angiotensin receptor blocker (ARB); beta-blocker

DENOMINATOR DESCRIPTION

Patients with a current diagnosis of heart failure due to left ventricular dysfunction (LVD) who are currently treated with angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB)

NUMERATOR DESCRIPTION

Number of patients from the denominator who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting
Pay-for-performance

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component**INCIDENCE/PREVALENCE**

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See the "Rationale" field.

UTILIZATION

Unspecified

COSTS

See the "Rationale" field.

Institute of Medicine National Healthcare Quality Report Categories**IOM CARE NEED**

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure**CASE FINDING**

Users of care only

DESCRIPTION OF CASE FINDING

Patients with a current diagnosis of heart failure due to left ventricular dysfunction (LVD)*

***Note:** The Quality and Outcomes Framework (QOF) includes the concept of exception reporting. This has been introduced to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect.

The following criteria have been agreed for exception reporting:

- A. patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding twelve months
- B. patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances, e.g., terminal illness, extreme frailty
- C. patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within three months and delivery of clinical standards within nine months, e.g., blood pressure or cholesterol measurements within target levels
- D. patients who are on maximum tolerated doses of medication whose levels remain suboptimal
- E. patients for whom prescribing a medication is not clinically appropriate, e.g., those who have an allergy, another contraindication or have experienced an adverse reaction
- F. where a patient has not tolerated medication
- G. where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- H. where the patient has a supervening condition which makes treatment of their condition inappropriate, e.g., cholesterol reduction where the patient has liver disease
- I. where an investigative service or secondary care service is unavailable

Refer to the original measure documentation for further details.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients with a current diagnosis of heart failure due to left ventricular dysfunction (LDV) who are currently treated with angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB)

Exclusions

See "Description of Case Finding" field for exception reporting.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of patients from the denominator who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Medical record
Registry data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Payment stages: 40-60%

EVIDENCE FOR PRESCRIPTIVE STANDARD

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

HF 4. The percentage of patients with a current diagnosis of heart failure due to LVD who are currently treated with an ACE inhibitor or angiotensin receptor blocker, who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers.

MEASURE COLLECTION

[Quality and Outcomes Framework Indicators](#)

MEASURE SET NAME

[Heart Failure](#)

DEVELOPER

British Medical Association
National Health Service (NHS) Confederation

FUNDING SOURCE(S)

The expert panel who developed the indicators were funded by the English Department of Health.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

The main indicator development group is based in the National Primary Care Research and Development Centre in the University of Manchester. They are: Professor Helen Lester, NPCRDC, MB, BCH, MD; Dr. Stephen Campbell, NPCRDC, PhD; Dr. Umesh Chauhan, NPCRDC, MB, BS, PhD.

Others involved in the development of individual indicators are: Professor Richard Hobbs, Dr. Richard McManus, Professor Jonathan Mant, Dr. Graham Martin, Professor Richard Baker, Dr. Keri Thomas, Professor Tony Kendrick, Professor Brendan Delaney, Professor Simon De Lusignan, Dr. Jonathan Graffy, Dr. Henry Smithson, Professor Sue Wilson, Professor Claire Goodman, Dr. Terry O'Neill, Dr. Philippa Matthews, Dr. Simon Griffin, Professor Eileen Kaner.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

None for the main indicator development group.

ENDORSER

National Health Service (NHS)

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2009 Mar

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

MEASURE AVAILABILITY

The individual measure, "HF 4. The Percentage of Patients with a Current Diagnosis of Heart Failure Due to LVD Who are Currently Treated with an ACE Inhibitor or Angiotensin Receptor Blocker, Who are Additionally Treated with a Beta-blocker Licensed for Heart Failure, or Recorded as Intolerant to or Having a Contraindication to Beta-blockers," is published in the "Quality and Outcomes

Framework Guidance." This document is available from the [British Medical Association Web site](#).

NQMC STATUS

This NQMC summary was completed by ECRI Institute on September 25, 2009. The information was verified by the measure developer on March 4, 2010.

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